REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the remarks which follow.

I. Amendments to the Claims

By the foregoing amendments to the claims, claims 1, 4-10 and 13 have been amended, and claims 3, 16 and 19 have been canceled.

In particular, claim 1 has been amended to incorporate the subject matter of claim 3.

In addition, other amendments to the claims have been made to clarify the claim language and bring the claims into better conformance with U.S. patent practice. These amendments are merely editorial in nature and are not intended to change the scope of the claims or any elements recited therein.

The amendments to the claims, including cancellation of claims, have been made without prejudice or disclaimer to any subject matter recited or canceled herein. Applicants reserve the right to file one or more continuation and/or divisional applications directed to any canceled subject matter. No new matter has been added, and entry of the foregoing amendments of the above-identified application is respectfully requested.

II. Response to Objection to the Claims

Claim 13 has been objected to because instead of a comma after "12", there is an "m".

In response, Applicants have corrected this error.

In view of the above, Applicants respectfully request reconsideration and withdrawal of this objection.

III. Response to Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 16 has been rejected under 35 U.S.C. § 112, second paragraph, as purportedly indefinite.

Claim 16 has been canceled, rendering this rejection moot.

IV. Response to Claim Rejections Under 35 U.S.C. § 103

A. Claims 1-13 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jason et al, (U.S. Patent No. 5,540,927) in view of Guerin et al., (WO 99/38945).

B. Claim 14 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Jason (Jason et al., U.S. Patent No. 5,540,927) in view of Guerin (Guerin et al., U.S. Patent No., 6,624,136), and further in view of Lee (Lee et al., J. Appl. Polymer Science, 1997).

The rejections under 35 U.S.C. § 103(a) are respectfully traversed.

Applicants submit that the Examiner has constructed a typical hindsight reconstruction of the invention, and used Applicants' claimed invention as a template by which to combine disparate references. Although the Examiner recites that the various limitations of Applicants' claims can be found in the cited references, it is clear that the references are combined, and the respective elements selected, based upon Applicants' claims rather than teachings of the art. Accordingly, there is no motivation to combine these two references, and even if one were to so combine the references, there is no teaching leading one of ordinary skill in the art to select the various elements for combination as the Examiner has done.

In particular, the present claims recite a method for producing microcapsules, comprising coacervating at least one solubilized plant protein and a polyelectrolyte having an opposite charge to the at least one plant protein. Applicants note that plant proteins are often impure, present low solubility due to the presence of a soluble fraction and of an insoluble fraction, and possess a low emulsifying capacity which renders necessary the use of an additional surfactant which interferes in the fixing phase of coacervation. However, the present inventors have discovered a method involving a solubilization step of the plant protein that overcomes the problem of the presence of the two fractions.

In order to expedite prosecution in the present application, and not to acquiesce to the Examiner's rejection, claim 1 has been amended herein to recite, *inter alia*, a step for solubilizing the plant protein. As shown in the present specification and recited in the claims, this solubilization step may be realized in a medium with a specific pH (between 2 and 7). If the chosen pH is below the isoelectric pH of the plant protein, then the protein is used as a cationic polyelectrolyte in the complex coacervation process whereas when the chosen pH is above the isoelectric pH of the plant protein, then the protein is used as an anionic polyelectrolyte. The

solubilization step also allows the increase of the concentration of the soluble protein in the medium, which leads to better encapsulation of the compounds.

In contrast to the present invention, Jason teaches a process of microencapsulation of material by complex coacervation employing gelatin and polyaspartic acid. The reference process is an improvement of the well-known technique called complex coacervation which, as explained in the present specification at page 1, line 35, is based on the phenomenon of desolvation of macromolecules with opposite charges resulting in the formation of two immiscible phases. In particular, Jason teaches the use of gelatin as a positively charged polymer and polyaspartic acid as a negatively charged polymer, in a classical coacervation system. However, Jason does not teach or suggest using plant proteins for coacervation.

Guerin teaches water dispersible granulates comprising a hydrophobic perfume in the form of droplets encapsulated by a solid organic matrix of plant origin and an emulsifier at the droplet/matrix interface. The granulates are prepared by a two-step process comprising (1) the preparation of an emulsion by any methods known in the art (see column 7, line 48); and (2) the drying of said emulsion to form granules (see column 7, lines 61-63). The drying step can be carried out by any means known to those skilled in the art, for example lyophilization or spray-drying. However, Guerin does not teach or suggest coacervation.

Applicants note that spray-drying is commonly used as an encapsulation technique, wherein a suspension containing the substance to be encapsulated and an amphipatic carrier are prepared in water before being fed into a spray dryer, at a temperature over the boiling point of water. Coacervation, on the other hand, is a phase separation of a liquid precipitate or phase when solutions of two hydrophilic colloids are mixed under suitable conditions. Coacervation does not include a dehydration step. Thus, a person of ordinary skill in the art would not have reasonably expected, based on the cited references, that plant proteins would be suitable in an encapsulation method comprising a coacervation rather than a drying step.

Finally, with regard to claim 14, Applicants submit that the Lee reference does not remedy the serious deficiencies of Jason and Guerin.

For at least the reasons set forth above, the references cited by the Examiner, taken alone or together, do not teach or suggest the invention recited in the present claims. Accordingly, Applicants respectfully request reconsideration and withdrawal of these rejections.

CONCLUSION

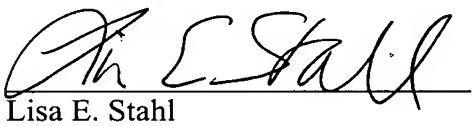
In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

In the event that there are any questions relating to this Amendment and Reply or the application in general, it would be appreciated if the Examiner would telephone the undersigned attorney so that prosecution of this application may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: July 16, 2007

By: 

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